

Name(s) of Risk Team Members: J. Scott, M. VanEssendelft, D. Passarello, J. Montalto			Point Value → Parameter ↓		1		2		3		4		5			
Area/Facility Description Title: Collider-Accelerator Department, Buildings 918, 926, 974 & 1101			Occupancy or Use		≤once/year		≤once/month		≤once/week		≤once/shift		>once/shift			
Area/Facility # (if applicable): Area-Wide FRA 18-08																
Area/Facility Description: Area-Wide Warehouses			Severity		First Aid Only		Medical Treatment		Lost Time		Partial Disability		Death or Permanent Disability			
			Likelihood		Extremely Unlikely		Unlikely		Possible		Probable		Multiple			
Approved by: E. Lessard			Date: 4-2-08		Rev.#: 0											
Reason for Revision (if applicable):									Comments:							
Annual Review																
			Before Additional Controls								After Additional Controls					
Physical Item or Activity		Hazard(s)	Control(s)	Occupancy A	Severity B	Likelihood C	Risk* AxBxC	Control(s) Added to Reduce Risk				Occupancy A	Severity B	Likelihood C	Risk* AxBxC	% Risk Reduction
Material Handling		See Facility-Wide Material Handling Evaluation	See Facility-Wide Material Handling Evaluation													
House Keeping		See Facility-Wide House Keeping Evaluation	See Facility-Wide House Keeping Evaluation													
Fire		See Facility-Wide Fire Evaluation	See Facility-Wide Fire Evaluation													
Electrical, up to 480 V ac		Shock or electrocution from exposed wiring, flash hazard, overheated wiring if not properly installed, overused or in disrepair, improper grounding	All equipment is listed or reviewed by CEE; Tier 1 inspections; disconnected cable policy; installations comply with applicable codes; procedures; training; distribution drawings; LOTO; working hot permits; qualified electricians and technicians; cabinet interlocks; postings; locked areas; guarding; work planning; GFCI; grounding standards; emergency procedures; two-person rule for hot work; PPE as per SBMS “Electrical Safety”	4	4	1	16									
Manual material handling		Overexertion – injuries caused by excessive lifting, pushing, pulling, holding, carrying or throwing of an object	Gloves, hardhat, handcarts, dollies, training, safety shoes, weight limit of 44 lbs. work planning	4	3	3	36									
Work at heights		Falls to lower level, such as falling from a ladder or over a railing	Postings, barriers, fall protection, maintenance, training, work planning, procedures, Tier 1 inspections, PPE, approved scaffolding and platforms, approved ladders, anti-slip surfaces	4	5	2	40									

Pressurized Systems	Being struck by an object due to a pressure release	Postings, PPE, maintenance, training, work planning, certification/testing of pressure related equipment, Tier 1 inspection	4	3	2	24					
Pressurized Systems	Contact with temperature – steam that result in burns	Postings, PPE, maintenance, training, work planning, certification/testing of pressure related equipment, Tier 1 inspection	3	3	2	18					
Walking Surfaces	Falls on same level	Postings, barriers, maintenance, work planning, work platforms, Tier 1 inspection	4	3	2	24					
Chemical Handling	Burns	Procedures, compliance with regulations, training, CMS inventory, MSDS, volume controls, Fire/Rescue group response, PPE as required, locked or controlled areas, postings, labeling, proper containers, segregation, spill cleanup equipment available, Tier 1 inspections	3	3	2	18					
Chemical Handling	Asphyxiation	Procedures, compliance with regulations, training, CMS inventory, MSDS, volume controls, Fire/Rescue group response, PPE as required, locked or controlled areas, postings, labeling, segregation, Tier 1 inspections	3	3	2	18					
Chemical Handling	Eye exposure	Procedures, compliance with regulations, training, CMS inventory, MSDS, volume controls, PPE as required, eyewash and showers, locked or controlled areas, postings, labeling, proper containers, segregation, Tier 1 inspections	3	4	2	24					
General area radiation	Residual radiation, external radiation	Postings, training, shielding, RCD surveys, TLD area monitoring program, RCD oversight, RWP, work planning	5	1	4	20					
Storage of Radioactive Materials	Residual radiation, external radiation	Fenced and posted areas, dosimetry, RWPs, work planning, RCD oversight, inspections, RMA inventories, some areas locked, shielding	5	1	4	20					
Storage of Radioactive Liquids	Residual radiation, external radiation, contamination	Fenced and posted areas, dosimetry, RWPs, work planning, RCD oversight, inspections, inventories, some areas locked, PPE, Article 12 certification	5	1	4	20					
Storage in general	Being struck by an object due to improperly secured material or loss of control	Inventory controls, load limits, Tier 1 inspections, housekeeping	4	4	2	32					
Storage in general	Bee stings, airborne pathogens	Training, work planning, Tier 1 inspections, clinic, PPE, maintenance. The C-AD ESHQ Office stocks Deep Woods OFF, which contains 25% DEET. Raid Wasp Killer is also stocked by the C-AD ESHQ Office for use as self-protection.	4	5	2	40					
Storage in General	Cuts, abrasions from damaged crates	Training, PPE, Tier 1 and other inspections, PE carpenter for repairs, housekeeping, work planning	4	2	3	24					
Security	None	Locks, Inventory control, Posting, OPM procedures, bar coding, camera surveillance, security tours, key control	4	1	1	4					
Roofs	Leaks	Tier 1 inspections, maintenance, work planning, postings, temporary roof, janitors, PE maintenance	4	3	4	48					
Roofs	Mold, mildew	Tier 1 inspections, maintenance	4	3	2	24					
Roofs	Electrical equipment damage	Tier 1 inspections, maintenance, work planning, postings, temporary roof, janitors, PE maintenance and surveillance	4	3	3	36					
Lighting	Poor visibility	Tier 1 inspections, maintenance, emergency lighting, temporary lighting	4	2	2	16					

Lighting	Falls on same level due to poor visibility	Tier 1 inspections, maintenance, emergency lighting, temporary lighting	4	2	2	16					
Lighting	Being struck against an object, such as a carpenter walking into a door frame due to poor lighting	Tier 1 inspections, maintenance, emergency lighting, temporary lighting	4	2	2	16					
Further Description of Controls Added to Reduce Risk:											
*Risk:	0 to 20	21 to 40	41-60		61 to 80		81 or greater				
	Negligible	Acceptable	Moderate		Substantial		Intolerable				